

LANLEO17 - SQA Unit Code F9GE 04

Service and repair land-based cutting and mowing equipment



Overview

This standard covers the underpinning knowledge of the construction operating principles of:

1. Implements and machinery
2. Fixed equipment and storage facilities.

It includes the recognition of faults, methods of repair, calibration and verification of performance. Equipment covered can be found in one or more of the following associated sectors of land-based engineering, e.g. agriculture, horticulture, amenities, ground care, arboriculture and forestry.

The standard also covers the cutting principles which include stationary/moving, rotating cutting, saw blades and hand tools.

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Performance criteria

You must be able to:

- P1 remove and replace cutting and/or mowing components
- P2 dismantle, repair and reinstate cutting and/or mowing machinery and tools to manufacturer's specification
- P3 sharpen cutting mechanisms to perform within manufacturers' specification, e.g. saw blades and chains, stationary and rotating knives, flails and hand tools
- P4 set cutting mechanisms to perform within manufacturers' specifications, e.g. balancing, blade clearances, cutting height, chop length
- P5 identify and rectify poor cutting performance

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Knowledge and understanding

You need to know and understand:

- K1 how to remove and replace components from cutting and mowing equipment
- K2 how to dismantle, repair and reinstate cutting and mowing equipment to the manufacturer's specification
- K3 the working principles of cutting and/or mowing equipment and their components, e.g. lawn and professional turf mowers, hedge trimmers, green crop mowers and toppers, harvester cutting mechanisms, saws, chippers and hand tools
- K4 the methods of sharpening and setting cutting mechanisms and components
- K5 the effect of crop type and conditions on the cutting and/or mowing process
- K6 how adjustments and settings effect the performance of cutting and/or mowing equipment

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Links to other NOS

Refer to **LEO1** Recognise and reduce hazards in the land-based engineering work area, for guidance on safe working practices.

Refer to **LEO4** Core land-based engineering principles – Mechanical principles, for guidance related to fundamental engineering principles and practices.

Refer to **LEO29** Monitor the handover and installation of land-based equipment for guidance related to operational requirements.

Refer to **LEO2** Organisational procedures in land-based engineering for guidance related to procedural or administrative recording and reporting practices.

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